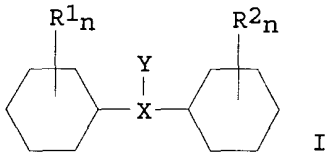
L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2002:51424 CAPLUS
DN 136:102181
TI Preparation of sulfate ester agents for protection of stratified squamous epithelium against injury by noxious substances
IN Hudson, Richard A.; Tobey, Neila A.; Orlando, Roy C.; Tillekeratne, Liyanaaratchinge M. V.
PA The Administrators of the Tulane Educational Fund, USA; University of Toledo
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002004411	A1	20020117	WO 2001-US21328	20010705
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001070304	A5	20020121	AU 2001-70304	20010705
	US 2002052408	A1	20020502	US 2001-900336	20010705
PRAI	US 2000-216771P	P	20000707		
	WO 2001-US21328	W	20010705		

OS MARPAT 136:102181
GI



I

AB **Sulfate** ester agents I [X = OCH2, CH2O; Y comprises at least one OSO3R4 moiety, wherein R4 is H or a pharmaceutically acceptable cation; n = 1-3; R1, R2 = H, halogen with an at. no. from 9 to 53, SO3R4, NCS, NCO, NH(CO)OR3, NH(CS)SR3, NH(C:NH)OR3, NHCOCH2Cl, NHCOCH2Br, NHCOCH:CH2, etc.], agents for treating **gastroesophageal** reflux disease, were prepd. E.g., a mixt. of phenol, NaOH, and water was treated with styrene oxide to give 2-phenoxy-2-phenylethanol. The product was dissolved in dry pyridine and was treated with pyridine-sulfur trioxide to give 2-phenoxy-2-phenylethanesulfate sodium salt.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1999:576815 CAPLUS
DN 131:204629
TI Implantable particles for tissue bulking and the treatment of gastroesophageal reflux disease, urinary incontinence, and skin wrinkles
IN Vogel, Jean Marie; Thomas, Richard; Boschetti, Egisto

PA Biosepra Inc., USA
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9944643	A1	19990910	WO 1999-US4689	19990304
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2322954	AA	19990910	CA 1999-2322954	19990304
	AU 9928916	A1	19990920	AU 1999-28916	19990304
	AU 742786	B2	20020110		
	EP 1059943	A1	20001220	EP 1999-909789	19990304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002505308	T2	20020219	JP 2000-534243	19990304
	US 6335028	B1	20020101	US 1999-263773	19990305
	US 2002068089	A1	20020606	US 2001-29294	20011228
PRAI	US 1998-77166P	P	19980306		
	WO 1999-US4689	W	19990304		
	US 1999-263773	A3	19990305		

AB The invention encompasses the treatment of urinary incontinence, gastroesophageal reflux disease and the amelioration of skin wrinkles using biocompatible hydrophilic cationic microparticles and a cell adhesion promoter. A soln. of methylolacrylamide, methacrylamidopropyltrimethylammonium chloride-HCl, N,N'-methylenebisacrylamide was heated and a gelatin soln. added and water and ammonium persulfate soln. contg. tetramethylethylenediamine added. The mixt. was stored at 70.degree. for 3 h until 3-dimensional gel formation. The gel was cut in small pieces, ground to small particles and the particles suspended in physiol. buffer contg. 5% glutaraldehyde and shaken and the particle suspension sieved.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1993:205246 CAPLUS
DN 118:205246
TI Protection of moist stratified squamous epithelia against damage from noxious luminal agents
IN Orlando, Roy C.; Tobey, Nelia A.
PA University of North Carolina, USA
SO U.S., 28 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5189056	A	19930223	US 1989-452393	19891219
	US 5374537	A	19941220	US 1992-983089	19921124
PRAI	US 1989-452393		19891219		

AB Protection of moist stratified squamous epithelia against damage from noxious luminal agents, e.g. HCl or N-acetylcysteine, is afforded by compds. having XSO3- (X = O, C) or XO42- or X2O72- (X = group VIb element

or S of group VIa). Compds. that provide protection against injury to moist stratified squamous epithelia include the sulfonates, sulfate esters, and tetrahedral-shaped divalent oxyanions of group VIb transition metals or of S. The protective effect of these compds. is due to stabilization of the intercellular junctions of moist stratified squamous epithelia so as to prevent the increase in permeability across the junctions that normally accompanies exposure to noxious luminal agents. Thus, Na2Mo2O4 (I) provided protection against acid injury to rabbit esophageal epithelium mounted in a Ussing chamber; the lowest protective dose was 10-20 mM. 4-Acetamido-4'-isothiocyano-2,2'-stilbene disulfonate (II) was also protective against acid injury to rabbit esophageal epithelium, and at doses 10-100 times lower than obsd. for compds. in the tetrahedral-shaped divalent oxyanion group. I and II also protected against damage from exposure to luminal N-acetylcysteine.

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1981:615236 CAPLUS
DN 95:215236
TI Cholinergic effects on esophageal transit and clearance
AU Phaosawasdi, Kamthorn; Malmud, Leon S.; Tolin, Richard D.; Stelzer, Fred; Applegate, Greg; Fisher, Robert S.
CS Dep. Med., Temple Univ. Hosp., Philadelphia, PA, USA
SO Gastroenterology (1981), 81(5), 915-20
CODEN: GASTAB; ISSN: 0016-5085
DT Journal
LA English
AB Modern manometric and scintigraphic techniques were employed in an effort to det. the relationships between esophageal contractions and esophageal transit and clearance. The effects of direct cholinergic stimulation with bethanechol [674-38-4] and blockade with atropine **sulfate** [55-48-1] were evaluated in a total of 20 normal subjects and 13 patients with symptomatic **gastroesophageal** reflux. Bethanechol increased the amplitudes of deglutition-induced and distention-induced esophageal contractions, but diminished their propagation velocities. Both esophageal transit and clearance were decreased in patients with reflux, but both were improved after bethanechol. Atropine **sulfate** decreased the amplitudes of contraction, accelerated their propagation velocities, and delayed esophageal transit and clearance. Both transit and clearance were diminished significantly when reflux patients were compared with normal subjects. The amplitudes of esophageal contraction were significantly lower in patients with reflux than in normal subjects. Neither bethanechol nor atropine affected the incidence of deglutition-induced esophageal contractions. These studies suggest that the efficiency of esophageal emptying may be detd. by the amplitudes of esophageal contractions.

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1975:472137 CAPLUS
DN 83:72137
TI Effects of premedication drugs on the lower esophageal high pressure zone and reflux status of Rhesus monkeys and man
AU Hall, A. W.; Moossa, A. R.; Clark, John; Cooley, G. R.; Skinner, D. B.
CS Pritzker Sch. Med., Univ. Chicago, Chicago, IL, USA
SO Gut (1975), 16(5), 347-52
CODEN: GUTTAK; ISSN: 0017-5749
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Morphine **sulfate** (I **sulfate**) [64-31-3], pethidine hydrochloride [50-13-5], or diazepam [439-14-5] decreased the lower esophageal high pressure zone and increased the probability of reflux in both monkeys and man. These findings are relevant in the prepn. of patients for surgery since **gastroesophageal** reflux and pulmonary

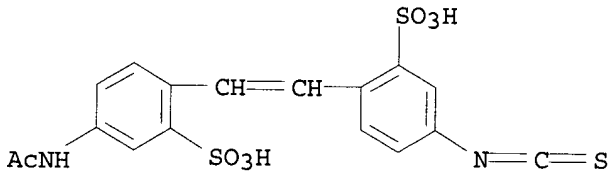
AN 1993:205246 CAPLUS
DN 118:205246
TI Protection of moist stratified squamous epithelia against damage from noxious luminal agents
IN Orlando, Roy C.; Tobey, Nelia A.
PA University of North Carolina, USA
SO U.S., 28 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5189056	A	19930223	US 1989-452393	19891219
	US 5374537	A	19941220	US 1992-983089	19921124
PRAI	US 1989-452393		19891219		

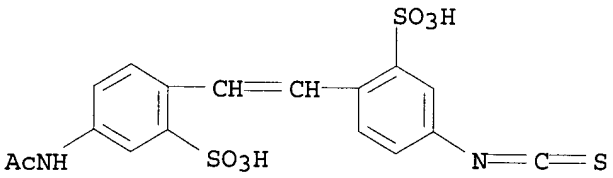
AB Protection of moist stratified squamous epithelia against damage from noxious luminal agents, e.g. HCl or N-acetylcysteine, is afforded by compds. having XSO3- (X = O, C) or XO42- or X2O72- (X = group VIb element or S of group VIa). Compds. that provide protection against injury to moist stratified squamous epithelia include the sulfonates, sulfate esters, and tetrahedral-shaped divalent oxyanions of group VIb transition metals or of S. The protective effect of these compds. is due to stabilization of the intercellular junctions of moist stratified squamous epithelia so as to prevent the increase in permeability across the junctions that normally accompanies exposure to noxious luminal agents. Thus, Na2Mo2O4 (I) provided protection against acid injury to rabbit esophageal epithelium mounted in a Ussing chamber; the lowest protective dose was 10-20 mM. 4-Acetamido-4'-isothiocyano-2,2'-stilbene disulfonate (II) was also protective against acid injury to rabbit esophageal epithelium, and at doses 10-100 times lower than obsd. for compds. in the tetrahedral-shaped divalent oxyanion group. I and II also protected against damage from exposure to luminal N-acetylcysteine.

IT **27816-59-7**
RL: BIOL (Biological study)
(moist stratified squamous epithelium protection from noxious luminal substance with)

RN 27816-59-7 CAPLUS
CN Benzenesulfonic acid, 5-(acetylamino)-2-[2-(4-isothiocyanato-2-sulfophenyl)ethenyl]- (9CI) (CA INDEX NAME)



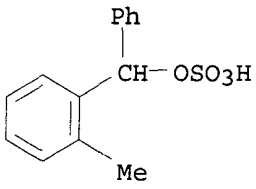
RN **27816-59-7** REGISTRY
CN **Benzenesulfonic acid, 5-(acetylamino)-2-[2-(4-isothiocyanato-2-sulfophenyl)ethenyl]- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,2'-Stilbenedisulfonic acid, 4-acetamido-4'-isothiocyanato- (7CI, 8CI)
OTHER NAMES:
CN 4-Acetamido-4'-isothiocyanate-stilbene-2,2'-disulfonic acid
CN 4-Acetamido-4'-isothiocyanatostilbene-2,2'-disulfonic acid
CN 4-Acetamido-4'-isothiocyano-2,2'-disulfonic acid stilbene
CN 4-Acetamido-4'-isothiocyano-2,2'-disulfonic stilbene
CN 4-Acetamido-4'-isothiocyano-2,2'-stilbene disulfonate
CN 4-Acetamido-4'-isothiocyanostilbene-2,2'-disulfonic acid
FS 3D CONCORD
MF C17 H14 N2 O7 S3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

134 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
134 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

AN 1971:74581 CAPLUS
DN 74:74581
TI Metabolism of orphenadrine citrate in man
AU Ellison, Theodore; Snyder, Albert; Bolger, James W.; Okun, Ronald
CS Riker Lab., Northridge, CA, USA
SO Journal of Pharmacology and Experimental Therapeutics (1971), 176(2), 284-95
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB After receiving oral doses of orphenadrine citrate (I citrate), 4 healthymen excreted the following metabolites in their urine: N-monodemethylorphenadrine, N,N-didemethylorphenadrine, orphenadrine N-oxide, and the glucuronide (sulfate) conjugates of o-methylbenzhydroxyacetic acid and o-methylbenzhydrol. Minor amts. of free o-methylbenzhydrol and o-methylbenzhydroxyacetic acid were also excreted.
IT **32190-19-5**
RL: BIOL (Biological study)
(of urine, as orphenadrine metabolite)
RN 32190-19-5 CAPLUS
CN Benzhydrol, 2-methyl-, hydrogen sulfate (8CI) (CA INDEX NAME)



AN 1991:30135 CAPLUS
DN 114:30135
TI Sustained-release pharmaceutical preparation containing drug-resin complexes
IN Kelleher, William Joseph; Carpanzano, Anthony Earl
PA Richardson-Vicks, Inc., USA
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 367746	A2	19900509	EP 1989-870168	19891031
	EP 367746	A3	19910123		
	EP 367746	B1	19940202		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	US 4996047	A	19910226	US 1988-265910	19881102
	CA 2001859	AA	19900402	CA 1989-2001859	19891031
	CA 2001859	C	19951031		
	AT 101033	E	19940215	AT 1989-870168	19891031
	AU 8944306	A1	19900510	AU 1989-44306	19891101
	AU 638420	B2	19930701		
	DK 8905463	A	19900503	DK 1989-5463	19891102
	JP 02172912	A2	19900704	JP 1989-287270	19891102
	JP 2941314	B2	19990825		
PRAI	US 1988-265910		19881102		
	EP 1989-870168		19891031		

AB A sustained-release oral pharmaceutical prepns. compromise a drug bound to small particles of an ion-exchange resin (capacity > 6 meq/g) to provide a drug-resin complex with a drug content >38% of the drug-resin complex. The drug-resin complex is subsequently coated with a water-permeable diffusion barrier coating that is insol. in **gastrointestinal** fluids, thereby providing a controllable sustained-release of drug under conditions encountered in the **gastrointestinal** tract. Thus, Amberlite IRP-69 was dissolved in water and mixed with pseudoephedrine. The washed and dried drug-resin complex was then coated with a soln. of Et cellulose, Myvacet 9-40, and EtOAc. After 180 min, 83% of pseudoephedrine was released in 0.1N HCl.

ben

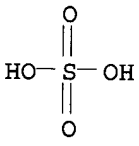
L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
AN 1993:205246 CAPLUS
DN 118:205246
TI Protection of moist stratified squamous epithelia against damage from noxious luminal agents
IN Orlando, Roy C.; Tobey, Nelia A.
PA University of North Carolina, USA
SO U.S., 28 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5189056	A	19930223	US 1989-452393	19891219 <--
	US 5374537	A	19941220	US 1992-983089	19921124
PRAI	US 1989-452393		19891219		

AB Protection of moist stratified squamous epithelia against damage from noxious luminal agents, e.g. HCl or N-acetylcysteine, is afforded by compds. having XSO3- (X = O, C) or XO42- or X2O72- (X = group VIb element or S of group VIa). Compds. that provide protection against injury to moist stratified squamous epithelia include the sulfonates, sulfate esters, and tetrahedral-shaped divalent oxyanions of group VIb transition metals or of S. The protective effect of these compds. is due to stabilization of the intercellular junctions of moist stratified squamous epithelia so as to prevent the increase in permeability across the junctions that normally accompanies exposure to noxious luminal agents. Thus, Na2Mo2O4 (I) provided protection against acid injury to rabbit esophageal epithelium mounted in a Ussing chamber; the lowest protective dose was 10-20 mM. 4-Acetamido-4'-isothiocyano-2,2'-stilbene disulfonate (II) was also protective against acid injury to rabbit esophageal epithelium, and at doses 10-100 times lower than obsd. for compds. in the tetrahedral-shaped divalent oxyanion group. I and II also protected against damage from exposure to luminal N-acetylcysteine.

IT **7757-82-6**, Sodium sulfate, biological studies **9042-14-2**, Dextran sulfate **10588-01-9** **11120-01-7**, Sodium tungstate **12680-48-7**, Sodium chromate **12680-49-8**, Sodium molybdate **13410-01-0**, Sodium selenate
RL: BIOL (Biological study)
(esophageal epithelium-protective activity of)

RN 7757-82-6 CAPLUS
CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

RN 9042-14-2 CAPLUS
CN Dextran, hydrogen sulfate (9CI) (CA INDEX NAME)

ben

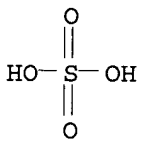
CM 1

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

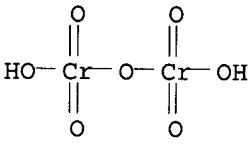
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 10588-01-9 CAPLUS
CN Chromic acid (H2Cr2O7), disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 11120-01-7 CAPLUS
CN Sodium tungsten oxide (9CI) (CA INDEX NAME)

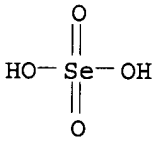
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 12680-48-7 CAPLUS
CN Chromium sodium oxide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 12680-49-8 CAPLUS
CN Molybdenum sodium oxide (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
O	x	17778-80-2
Na	x	7440-23-5
Mo	x	7439-98-7

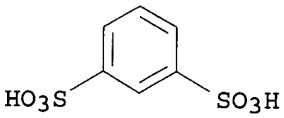
RN 13410-01-0 CAPLUS
CN Selenic acid, disodium salt (9CI) (CA INDEX NAME)

ben



●2 Na

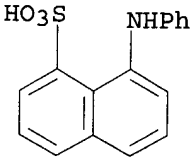
IT **98-48-6**, 1,3-Benzenedisulfonic acid **110-04-3**,
1,2-Ethanedisulfonic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(esophageal epithelium-protective activity of)
RN 98-48-6 CAPLUS
CN 1,3-Benzenedisulfonic acid (9CI) (CA INDEX NAME)



RN 110-04-3 CAPLUS
CN 1,2-Ethanedisulfonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

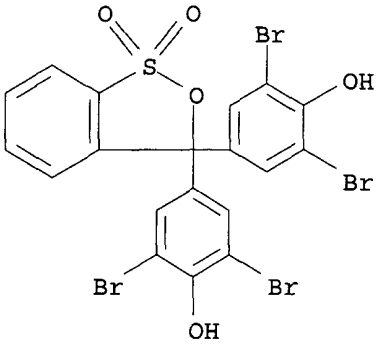
$HO_3S-CH_2-CH_2-SO_3H$

IT **82-76-8 115-39-9**, Bromophenol blue **1738-02-9**,
Sulfonazo III **27816-59-7 53005-05-3**
147140-76-9
RL: BIOL (Biological study)
(moist stratified squamous epithelium protection from noxious luminal
substance with)
RN 82-76-8 CAPLUS
CN 1-Naphthalenesulfonic acid, 8-(phenylamino)- (9CI) (CA INDEX NAME)

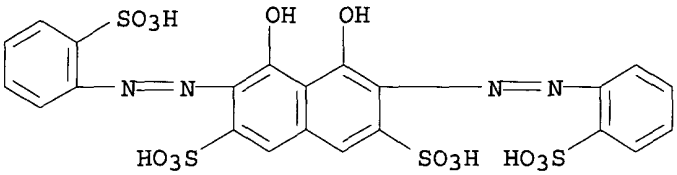


RN 115-39-9 CAPLUS
CN Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo-
(9CI) (CA INDEX NAME)

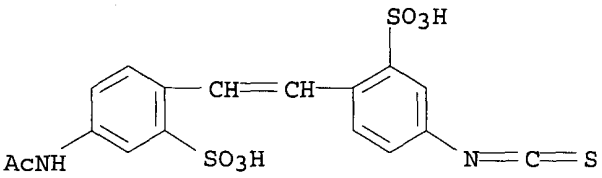
ben



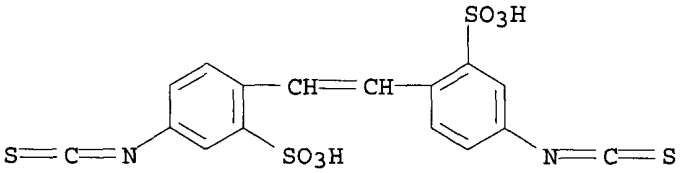
RN 1738-02-9 CAPLUS
CN 2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-3,6-bis[(2-sulfophenyl)azo]- (9CI) (CA INDEX NAME)



RN 27816-59-7 CAPLUS
CN Benzenesulfonic acid, 5-(acetylamino)-2-[2-(4-isothiocyanato-2-sulfophenyl)ethenyl]- (9CI) (CA INDEX NAME)

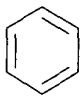


RN 53005-05-3 CAPLUS
CN Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-isothiocyanato- (9CI) (CA INDEX NAME)



RN 147140-76-9 CAPLUS
CN Benzenesulfonic acid, (1,2-ethenediyl)bis[nitro- (9CI) (CA INDEX NAME)

ben



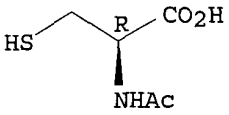
D1—SO_3H

D1—NO_2

1/2 (D1—CH═CH—D1)

IT **616-91-1**, N-Acetylcysteine **7647-01-0**, Hydrochloric acid, biological studies
RL: BIOL (Biological study)
(tetrahedral divalent oxyanions and sulfonates and sulfate esters for moist stratified squamous epithelium protection from)
RN 616-91-1 CAPLUS
CN L-Cysteine, N-acetyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 7647-01-0 CAPLUS
CN Hydrochloric acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

HCl

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